

### **REMARKS**

The present invention provides a structure participatory data collecting research system that enables a large number of participants to collectively develop valuable environmental data that can be disseminated to the individual participants through a royalty incentive system.

The underlying concept of the present invention is the collective effort of a number of different participants that can shorten the cycle of determining, for example, both the growth characteristics and the desirable characteristics of a particular plant with a communal development effort with an incentive system for the individual subscribers or participants being able to collect royalty payments on an incremental basis for their contributions as the research project proceeds forward.

Figure 1 discloses the multiple users, from a large scale network for an intra-farm network system to a small scale network of an individual that can collectively participate by the use of multiple controlling systems for collecting data pertaining to the conditions of promoting a culturing of a desired plant.

As shown in Figure 4, and as described for example in our Claim 40, a condition data collecting system specifically defines multiple controlling systems to promote work on an experimental cultural development with each of the multiple controlling systems having an environment controlling unit and an information processing system that facilitates the collective efforts of the multiple controlling systems to enable a large prolific effort where data can be collected from each of the participants with an incentive of a royalty available to each of the participants to be used as an inducement for this collective research effort as shown in Figure 4.

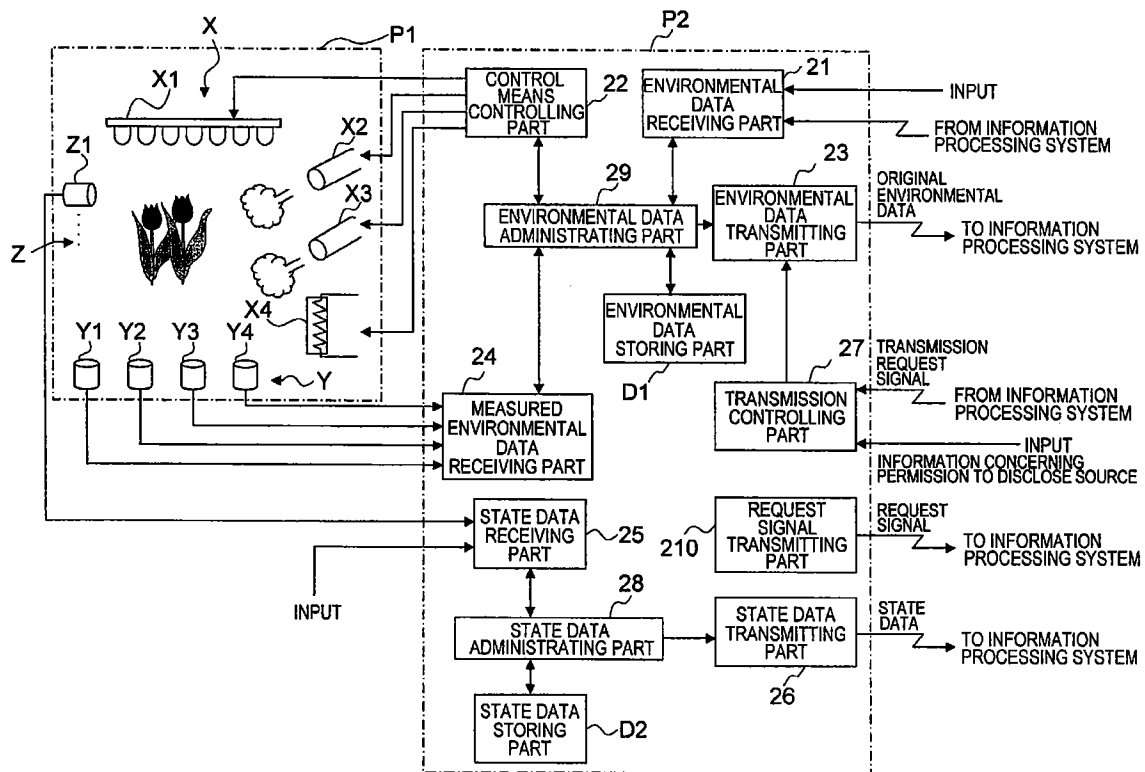


FIG.4

As noted on Page 23, Lines 4-10, applicant has provided an inducement for a collective number of participants that is neither recognized nor taught by any combination of the references of record.

In addition, since there is a sense of security that royalty is paid, a large number participants to develop environmental data can be prospected and the environmental data of this kind that have extremely large number of parameters and require significant work to find can be developed rapidly. At the same time, since the developed environmental data is administered certainly and can be reused, it is possible to shorten a period of time to develop environmental data by utilizing the developed environmental data.

The Office Action has again relied upon *Lys et al.* (U.S. Patent No. 6,577,080) in rejecting our claims over the *Lieu et al.* (U.S. Patent Publication 2003/0028914) under 35 U.S.C. §103.

*Lys et al.* is admittedly a broad based lighting system which permits an LED lighting control system to be used in a large number of different entertainment devices and appliances.

The Office Action specifically contended that “multiple controlling systems” were taught by *Lys et al.*, but the citation of Column 7, Lines 27-35 is simply directed to one light control system to govern an illumination control driver. There is no teaching of multiple controlling systems, each including an environmental controlling unit with multiple information processing systems which can both receive and further generate new environmental growth data. The Office Action also refers to Column 40, Lines 58-66 for a smart light bulb, which is shown in Figure 70 where the light bulb may receive driver signals from “another device.”

*Lys et al.* does not teach multiple controlling systems with an interactive receipt and distribution of information for a collective research project.

As can be appreciated, Figures 92A and 92B of the *Lys et al.* reference and the description in Column 62, Lines 50-67, is the only teaching of lighting by LED’s associated with plant growth. It is clear, however, that these citations do not teach multiple controlling systems to link, with an information processing system, that communicatively is connected to a plurality of participants through a network so that they can collectively perform research and share, on the basis of royalty incentives, incremental improvements and fundamental environmental data that can be available to all as a virtual research network.

Applicant wishes to stress that *Lys et al.* cannot teach to a person of ordinary skill in this field, the unique collective research efforts that are incentivized by royalty payments for each of the participants so that parallel experimentation on different parameters can be encouraged and rewarded to shorten the development time cycle.

Certainly there is no suggestion in *Lys et al.* of providing such a system to “improve an LED lighting system,” which is the principal teaching of the *Lys et al.* disclosure.

As noted in the MPEP at §2143.02:

A rationale to support a conclusion that a claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art. *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_, \_\_\_, 82 USPQ2d 1385, 1395 (2007); *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); *Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152, 87 USPQ 303, 306 (1950). (underline added)

In summary, *Lys et al.* cannot teach or disclose an environmental data receiving part that receives relevant environmental data which is data concerning an environment of the culture including data on light for promoting a growth of the culture from the first controlling system and share it by permitting other multiple users with environmental data receiving parts contained in multiple controlling systems.

As can be appreciated, each of the multiple controlling systems also include an environmental data administrating parts, an environmental data delivering part, a state data receiving part, a state data administrating part or a state data delivering part.

The Office Action, on Page 4, cited Column 4, Lines 3-20 and 33-34 as a purported data network for carrying signals from a control device. An EKG machine only provides a description about lighting elements which could be illuminated with a particular color and the color could change to reflect a particular cardiac problem. It is certainly not a collective effort to develop experimental data on a culture.

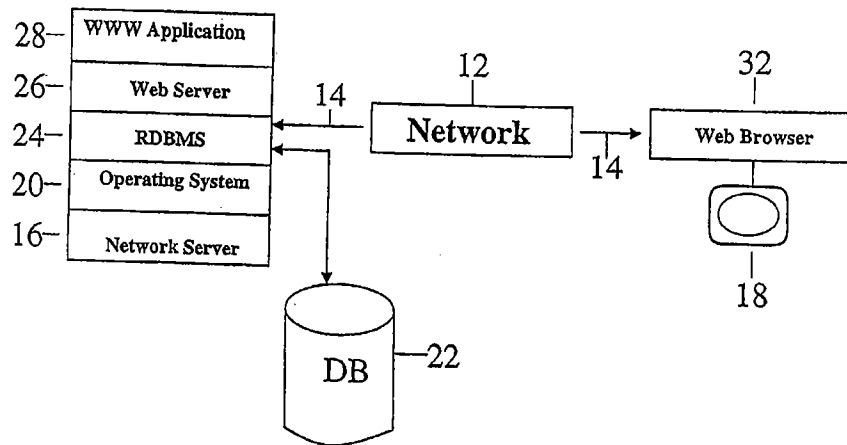
As can be appreciated, to achieve the purposes of our present invention, the *Lys et al.* reference is incapable of teaching a collective effort to find optimized parameters for growing a culture by a spontaneous and mutual information communication system as defined by each of the structured elements in our claims such as Claim 40, that starts with multiple participatory controlling systems.

The Office Action acknowledged on Page 7 that the *Lys et al.* reference did not disclose a state data receiving part that receives state data including image data of living organisms or a state of a midstream process, nor a royalty data producing party that produces early data which is valued and received in return for disclosing environmental data produced by the first controlling system to the second controlling system.

It is respectfully submitted that this is an admission that the *Lys et al.* reference is not a condition data collecting system for promoting research that utilizes multiple controlling systems, each of which is respectively capable of promoting the development of a culture to the advantage of all the participants.

The Office Action relies on *Liu et al.* (U.S. Patent Publication 2003/0028914) as teaching these features.

However, the *Liu et al.* reference is only a searchable database that is structured to trace various plant mutant traits and DNA sequences that can be made commercially available to a paying customer. The customer is even given the option of various forms of business arrangements and the information can be made accessible through a web browser whose user (18) is shown in the following Figure 3.



**Fig. 3**

[0158] FIG. 3 is a schematic representation of a network 12 that may be used for allowing users to access, retrieve and view information in a relational database containing the database of plant records, in accordance with another aspect of the present invention. Network 12 includes a communication path 14 through which a network server 16 and a representative client 18 are connected.

As can be readily appreciated, one or more customers or clients access and search the database 22 to only receive information pursuant to a business arrangement. This disclosure, however, does not suggest or teach multiple controlling systems with a capacity to create a common collective database by a give and take of information as part of a data collecting system with an incentive of royalties for each of the multiple controlling system proprietors. Our desired result is to shorten a development time period and not to orderly arrange a searching database by one research facility that can sell it to third parties.

Our basic concept and specific structure is neither taught nor suggested by any possible combination of the *Lys et al.* and the *Liu et al.* teachings.

The *Liu et al.* reference teaches a method of generating a traceable database to correlate a mutant plant trait with a modified expression of one or more plant genes. An activation tagging vector such as some form of a virus, can be used as an insertional mutant which can be associated with identifying a series of related plants that can ultimately provide a library of transformant seeds. The database can be constructed so that a common mutant trait and/or a DNA sequence information can be used for tracking information from the database. Information from the database can be sold to clients or customers. However, in the specific operation of the network shown above in Figure 3, it is incapable of teaching a common participatory data collecting system as defined in our current claims.

While the *Liu et al.* disclosure is of interest in providing a multi generational plant trait analysis, it is not designed to achieve the purposes of the present information, nor is the royalty or “business arrangement” system designed to encourage contributions by multiple participants with an equal reward system of royalty payments to each of the contributors as defined in our present invention. The ability to provide base information is neither suggested nor taught, nor is there any teaching of an environmental data receiving part and an environmental data delivering part that can be shared between a plurality of multiple controlling systems.

In essence, *Lys et al.* teaches a lighting entertainment system with a sparse mention of plant growth among many different types of other applications. It is not encouraging a plurality of controlling systems that can each generate and create useful data and information that can be combined with an incentive for each of the participants to enjoy a monetary reward to shorten the discovery time period.

The *Liu et al.* reference organizes a database of plant mutant traits or DNA sequences that can be easily searched for a cost of a business arrangement. It is not the structure of a

participatory mutual research efforts that create a virtual research team to provide contributory information to shorten a time period to achieve a research goal.

Our present claims define such a participatory system and define it in structural elements that are neither taught nor suggested in any combination of these references under 35 U.S.C. §103.

To emphasize the potential advantages of such a royalty incentive virtual research team, applicant would bring the Examiner's attention to a recent challenge proposal by the U.S. Government that was reported in the attached article of *MIT Team Wins Darpa's Treasure Hunt in Less Than One Day*.

As can be readily appreciated, the surprisingly quick response in using the Internet with financial rewards to solve a problem that the U.S. government thought would take nine days in 2009, should bear weight on any determination of obviousness under 35 U.S.C. §103.

As set forth in MPEP 2142,

To reach a proper determination under 35 U.S.C. §103, the examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the examiner must then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. Knowledge of applicant's disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the "differences," conduct the search and evaluate the "subject matter as a whole" of the invention. The tendency to resort to "hindsight" based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

In summary, our invention can be traced back to a priority date of September 26, 2002 and our invention claims should be judged within that time frame and in this environment, we



have a governmental head of the Pentagon's Defense Advance Research Products Agency being surprised in December of 2009, at a concept recognized by our present inventors for utilizing the Internet in a cooperative royalty incentive research effort to produce a fast response.

It is requested that the Examiner take these factors into determination in determining the novelty over the cited references as set forth in our current claims.

It is respectfully submitted that the application is now in condition for allowance and an early notification of the same is requested.

If the Examiner believes a telephone interview will assist in the prosecution of this matter, the undersigned attorney can be contacted at the listed phone number.

Very truly yours,

**SNELL & WILMER L.L.P.**



---

Joseph W. Price  
Registration No. 25,124  
600 Anton Boulevard, Suite 1400  
Costa Mesa, California 92626-7689  
Telephone: (714) 427-7420  
Facsimile: (714) 427-7799

Serial No. 10/529,162  
Attachment to Response  
2 Pages

guardian.co.uk

# MIT team wins Darpa's treasure hunt in less than one day

**Bobbie Johnson** in San Francisco  
guardian.co.uk, Monday 7 December 2009 06.37 GMT

**A** [larger](#) | [smaller](#)



A \$40,000 online challenge proposed by the US government has been won by a team of researchers from the Massachusetts Institute of Technology - just hours after it was launched.

The Darpa Network Challenge, which took place on Saturday, offered a cash prize for the first group to successfully locate 10 large red weather balloons hidden at a string of secret locations across the US.

Competitors were asked to use the internet and social networking sites to discover the whereabouts of the balloons, in what Darpa - the Pentagon's Defense Advanced Research Projects Agency - said was an experiment to discover how the internet could help with rapid problem solving.

More than 4,000 groups eventually registered to take part, but although the organisers had given players up to nine days to track the balloons down, the team from MIT

scooped victory within nine hours of the launch.

"Darpa salutes the MIT team for successfully completing this complex task less than nine hours after the balloon launch," said Regina Dugan, the director of the agency.

The winning team has not explained precisely how they came to discover the location of all 10 balloons, but the process detailed on the [team website](#) explains that they created a viral campaign to encourage people to put forward information they gleaned about the locations.

The team offered the first person to spot a balloon a \$2,000 share of the prize money, but smaller awards would also be given to those who referred that player to MIT's website - a scheme of incentives aimed at getting people to urge their friends to take part.

Whatever happened in the end, it appeared to work - and quickly.

"The challenge has captured the imagination of people around the world, is rich with scientific intrigue and, we hope, is part of a growing 'renaissance of wonder' throughout the nation," said Dr Dugan.

In the end the eight-foot balloons were hidden in locations across nine states: Arizona, California, Delaware, Florida, Georgia, Oregon, Tennessee, Texas and Virginia.

guardian.co.uk © Guardian News and Media Limited 2009